CLAIMS

What is claimed is:

1. A method for transposed splitting of ion cut materials, comprising the steps of:

(a) introducing a plurality of acceptor centers into a solid material;

(b) injecting a plurality of atoms into said material at a location spaced apart from the location of said acceptor centers;

(c) transporting said atoms toward said acceptor centers; and

(d) expunging a layer of said material, wherein said expunged layer has a surface with a contour defined by said acceptor centers.

2. A method as recited in claim 1, further comprising the step of attaching said expunged layer to a second solid material.

3. A method as recited in claim 1, wherein said solid material is attached to a second solid material prior to said expunging step.

4. A method as recited in claim 1, wherein said solid material comprises a semiconductor material.

5. A method as recited in claim 4, wherein said semiconductor material comprises silicon.

6. A method as recited in claim 1, wherein said atoms comprise hydrogen atoms.

7. A method as recited in claim 1, wherein said acceptor regions are formed by introducing a getter material into said solid material.

8. A method as recited in claim 7, wherein said solid material comprises silicon and said getter material is selected from the group consisting of Group III materials.

9. A method as recited in claim 7, wherein said solid material comprises silicon and said getter material is selected from the group consisting of gallium and boron.

10. A method as recited in claim 1, wherein said atoms are transported by drift created by a force field.

11. A method as recited in claim 1, wherein said atoms are transported by drift created by an electric field.

12. A method as recited in claim 1, wherein said atoms are transported by diffusion.

13. A method for transposed splitting of ion cut materials, comprising the steps of:

(a) introducing a plurality of acceptor centers into a solid material, wherein said acceptor centers form a contour line in said material;

(b) injecting a plurality of atoms into said material at a location spaced apart from the location of said acceptor centers;

(c) transporting said atoms toward the location of said acceptor centers; and

(d) expunging a layer of said material, wherein said expunged layer has a surface with a contour following the contour line of said acceptor centers.

14. A method as recited in claim 13, further comprising the step of attaching said expunged layer to a second solid material.

15. A method as recited in claim 13, wherein said solid material is attached to a second solid material prior to said expunging step.

16. A method as recited in claim 13, wherein said solid material comprises a semiconductor material.

17. A method as recited in claim 16, wherein said semiconductor material comprises silicon.

18. A method as recited in claim 13, wherein said atoms comprise hydrogen atoms.

19. A method as recited in claim 13, wherein said acceptor regions are formed by introducing a getter material into said solid material.

20. A method as recited in claim 19, wherein said solid material comprises silicon and said getter material is selected from the group consisting of Group III materials.

21. A method as recited in claim 19, wherein said solid material comprises silicon and said getter material is selected from the group consisting of gallium and boron.

22. A method as recited in claim 13, wherein said atoms are transported by drift created by a force field.

23. A method as recited in claim 13, wherein said atoms are transported by drift created by an electric field.

24. A method as recited in claim 13, wherein said atoms are transported by diffusion.

25. A method for transposed splitting of ion cut materials, comprising the steps of:

(a) introducing a plurality of acceptor centers into a solid material and forming a contour line in said material defined by said acceptor centers;

(b) injecting a plurality of atoms into said material at a location spaced apart from the contour line of said acceptor centers;

(c) transporting said atoms toward the contour line formed by said acceptor centers; and

(d) expunging a layer of said material along a contour line following the contour line of said acceptor centers.

26. A method as recited in claim 25, further comprising the step of attaching said expunged layer to a second solid material.

27. A method as recited in claim 25, wherein said solid material is attached to a second solid material prior to said expunging step.

28. A method as recited in claim 25, wherein said solid material comprises a semiconductor material.

29. A method as recited in claim 28, wherein said semiconductor material comprises silicon.

30. A method as recited in claim 25, wherein said atoms comprise hydrogen atoms.

31. A method as recited in claim 25, wherein said acceptor regions are formed by introducing a getter material into said solid material.

32. A method as recited in claim 31, wherein said solid material comprises silicon and said getter material is selected from the group consisting of Group III materials.

33. A method as recited in claim 31, wherein said solid material comprises silicon and said getter material is selected from the group consisting of gallium and boron.

34. A method as recited in claim 25, wherein said atoms are transported by drift created by a force field.

35. A method as recited in claim 25, wherein said atoms are transported by drift created by an electric field.

36. A method as recited in claim 25, wherein said atoms are transported by diffusion.

37. A method for transposed splitting of ion cut materials, comprising the steps of:

(a) introducing a plurality of acceptor centers into a solid material;

(b) introducing a plurality of atoms into said material at a location spaced apart from the location of said acceptor centers;

(c) transporting said atoms toward said acceptor centers; and

(d) expunging a layer of said material, wherein said expunged layer has a surface with a contour defined by said acceptor centers.

38. A method as recited in claim 37, further comprising the step of attaching said expunged layer to a second solid material.

39. A method as recited in claim 37, wherein said solid material is attached to a second solid material prior to said expunging step.

40. A method as recited in claim 37, wherein said solid material comprises a semiconductor material.

41. A method as recited in claim 40, wherein said semiconductor material comprises silicon.

42. A method as recited in claim 37, wherein said atoms comprise hydrogen atoms.

43. A method as recited in claim 37, wherein said acceptor regions are formed by introducing a getter material into said solid material.

44. A method as recited in claim 43, wherein said solid material comprises silicon and said getter material is selected from the group consisting of Group III materials.

45. A method as recited in claim 43, wherein said solid material comprises silicon and said getter material is selected from the group consisting of gallium and boron.

46. A method as recited in claim 37, wherein said atoms are transported by drift created by a force field.

47. A method as recited in claim 37, wherein said atoms are transported by drift created by an electric field.

48. A method as recited in claim 37, wherein said atoms are transported by diffusion.

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